

Accepted Manuscript

Title: Rapid and Semiquantitative Detection of *Staphylococcus epidermidis* in Humor Samples by Microfluidic Platform

Authors: Xinlian Zhang, Xiaoxu Li, Qi Liu, Shaorui Ke, Yinghong Ji, Sixiu Liu, Guodong Sui



PII: S0925-4005(18)31632-0
DOI: <https://doi.org/10.1016/j.snb.2018.09.020>
Reference: SNB 25326

To appear in: *Sensors and Actuators B*

Received date: 22-12-2017
Revised date: 30-8-2018
Accepted date: 6-9-2018

Please cite this article as: Zhang X, Li X, Liu Q, Ke S, Ji Y, Liu S, Sui G, Rapid and Semiquantitative Detection of *Staphylococcus epidermidis* in Humor Samples by Microfluidic Platform, *Sensors and amp; Actuators: B. Chemical* (2018), <https://doi.org/10.1016/j.snb.2018.09.020>

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

Rapid and Semiquantitative Detection of *Staphylococcus epidermidis* in Humor Samples by Microfluidic Platform

Xinlian Zhang^a, Xiaoxu Li^a, Qi Liu^a, Shaorui Ke^a, Yinghong Ji^{b,*}, Sixiu Liu^a, Guodong Sui^{a,c,*}

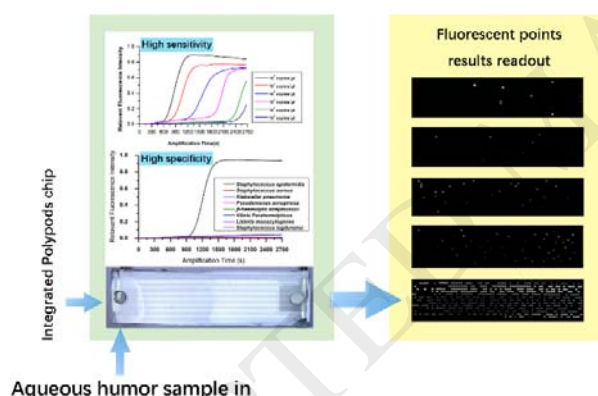
^a Shanghai Key laboratory of Atmospheric Particle Pollution Prevention(LAP3), Department of Environmental Science & Engineering, Fudan University, No 220 Handan Road, Shanghai 200433, P. R. China

^b Department of Ophthalmology & Eye Institute, Eye & ENT Hospital of Fudan University, Key Laboratory of Myopia of State Health Ministry, and Key Laboratory of Visual Impairment and Restoration of Shanghai, No. 83 Fenyang Road, Shanghai, 200031, China

^c Institute of Biomedical Science, Fudan University, No 138 Yixueyuan Road, Shanghai 200032, P. R. China

* Corresponding authors. E-mail address: gsui@fudan.edu.cn (G. Sui), yingyong_ji@163.com (Y. Ji).

Graphical Abstract



Highlights:

- An integrated polypods chip had realized sample pretreatment and detection on a single chip.
- High specificity and sensitivity had been shown in on-chip LAMP assay, which is suitable for tiny volume clinical sample detection.
- 20 aqueous humor samples collected from post-surgery patients had been detected and analyzed on established polypods chip.

Download English Version:

<https://daneshyari.com/en/article/10226363>

Download Persian Version:

<https://daneshyari.com/article/10226363>

[Daneshyari.com](https://daneshyari.com)